AMENDED LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application:

1. (Currently amended)   A method for determining therapeutic resonant frequencies of electromagnetic radiation for treating an animal or human infected with a disease caused by a pathogen, wherein said pathogen comprises a genomic material, the genomic material being surrounded by a medium, comprising:

   providing a frequency-emitting device;

   determining a velocity of the electromagnetic radiation through the medium surrounding the genomic material;

   determining the length of the genomic material;

   determining a first therapeutic resonant frequency to influence the genomic material in a first electromagnetic frequency range, by dividing the velocity of the electromagnetic radiation through the medium surrounding the genomic material by the length of the genomic material;

   dividing or multiplying the first therapeutic resonant frequency by a factor of a power of two, to obtain a second therapeutic resonant frequency to influence said genomic material, wherein the second therapeutic resonant frequency is in an electromagnetic frequency range capable of being emitted by the frequency-emitting device;

   programming the frequency-emitting device to emit the first, or the second resonant frequency; and

   treating the animal or human with the programmed resonant frequency intended to influence said genomic material, thereby rendering a therapeutic or desirable effect in the animal or human.

2. (Previously Presented)   The method of claim 1, wherein determining the length of the genomic material comprises using the known spacing value between adjacent base pairs or bases, determining the number of base pairs or bases in the genomic material, and multiplying the number of base pairs or bases in the genomic material by the known spacing value between adjacent base pairs or bases.

3. (Canceled)

4. (Previously Presented)   The method of claim 1, wherein the medium surrounding the genomic material has electrical permittivity and magnetic permeability, wherein determining the velocity of the electromagnetic radiation through the medium surrounding the genomic material comprises relating the electrical permittivity and magnetic permeability to the velocity, wherein the velocity $= 1 / \sqrt{(\varepsilon \, \mu)}$, where ε is the electrical permittivity of the medium, and μ is the magnetic permeability of the medium.

5. (Canceled)

6. (Currently Amended)   The method of claim 1, further comprising the steps of:

dividing at least one of the previously calculated resonant frequencies by a positive integer to determine subharmonic frequencies, or

multiplying at least one of the previously calculated resonant frequencies by a positive integer to determine harmonic frequencies;

additionally programming the frequency-emitting device to emit one or more of the said subharmonic or harmonic frequencies, and

treating the animal or human with one or more of the said subharmonic or harmonic frequencies.

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) The ~~methods~~ <u>method</u> of ~~claim 1 and~~ claim 6, wherein treating a human with the said first or second resonant frequency, or one of the said subharmonic or harmonic frequencies, comprises influencing said genomic material present in humans.

10. (Currently Amended) The ~~methods~~ <u>method</u> of ~~claim 1 and~~ claim 6, wherein treating an animal with the said first or second resonant frequency, or one of the said subharmonic or harmonic frequencies, comprises influencing said genomic material present in animals.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

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34. (Cancelled)

35. (Cancelled)

36. (Cancelled)